

SMOKE SIGNALS

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2002 GROUND HOG PARTY

By Duane Haas W9BCV
Rock River Radio Club Newsletter

Saturday night, October 19th, 2002 will go down in history as the date that the Annual Ground Hog Party was re-activated. After being inactive since the year 1988 the former co-sponsor, Bettie Norbury, K9GJC, of Watertown, decided to "revive" the event. With the help of her son, Tim, KB9SLS, and his friend, Roseanne, an outstanding graphic/pictorial flyer was produced and sent to all prospective and former attendees inviting them to come to the "Ground Hog of North America USA. Hole #1" party. The October newsletter was already in print when we heard about it so I quickly typed up a "FLASH NEWS" item and revised the last page to include the information from Bettie. I did not receive the flyer until after the newsletter was released. They did such a fine job making the flyer which we would have included with the newsletter if it had been received a day earlier. I'm sorry about that, Bettie, we certainly didn't want to slight you. For the record, next year's Ground Hog Party will be held on the Second Saturday in October. The date is October 11, 2003 so mark that down on next year's calendar now so the day is reserved.

Claude Held, WA9KCU, of Watertown was MC, who with the help of his buddy, Denny WB9MSM, provided plenty of entertainment. There were 32 in atten-

dance and the food was excellent, something to remember for next year. All had a chance to introduce themselves and make pertinent remarks if they wished. For those of you who never heard of the Ground Hog Party, it was noted by Claude that the party originated back in 1949. The originator was Erv Buchart, W9QHR. He had a lot of friends that got together on ground wave" propagation on IO meters after the band was dead. They didn't have 2 meters in those day for locals like we have now and that 10 meter group was the core of the Ham community. He invited them to come to his place for a "Party". Well, so many responded that they had to move the party to the Moose Hall down town in Watertown. He ran the show until 1968 when it was discontinued. There was a lapse of Ground Hog Parties until 1976 at which time Theron, W9LUB and Bettie Norbury, K90JC of Watertown took over and ran it until 1988. With the passing of Theron the Ground Hog Party became silent too. It is interesting to know that Erv, W9QHR, designated Bettie as his right hand shadow and Roy Pedersen, K9FHI as his left hand shadow. We would like to let you know that Roy also helped Bettie organize this year's party.

The climax of the evening was the auction with Claude as the auctioneer. The

tradition has been to auction off the "Traveling Trophy" to the highest bidder. The winner gets to keep the trophy for one year and have their call sign engraved on it. They must return it next year to be auctioned off again. The proceeds are use to defray the cost of advertising the party and other expenses for the next year. Herb Roehner, WA9UVK, of Grafton was the last recipient of the trophy back in 1988 and he brought it to the party for this year's auction. Claude got the bidding off to a great start and things got quite lively with Denny, WB9MSM doing all the "raising". It got up to \$35.00 and as you might expect, Denny took it home, the winner. He had smiles, ear to ear as you can see on one of the photos included in this newsletter.

Bettie had several albums of pictures from years passed for those who were interested. The outstanding piece of interest was the cage that houses "Ghona" the

stuffed Ground Hog". The photo shown elsewhere in this newsletter shows him with the loop antennas in his right hand and a smile on his face, coming up from "Hole #1". It is only to look at, it belongs to Bettie. All in all, I'd say all went home happily and ready to come back next year for another day of fun and reminiscing.

PS, Wouldn't you know it, I just found my Certificate that reads "This is to certify that W9BCV, a "GHONA" attended regular meeting No. 1, held at WATERTOWN, WIS., and duly honored our chief "GHONA" Erv. W9QHR. Date: Sept. 1947. I knew it was some place that was safe but as things happen at my age, I forgot where that special place was. I wanted to bring it to the party to show it to all but now that will have to wait until next year. From all indication from those in attendance, next year should be at least twice the size of this year's and they are looking forward to coming back in 2003.

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Check us out on the web at
[Http://www.bsas.org](http://www.bsas.org)



WHAT'S HAPPENING

Swapfests and Other Social Events — Club Meetings Amateur Radio Exam Schedules

Edited by **Kenneth A. Ebnetter, K9EN**, 822 Wauona Trail, Portage WI 53901 — kenneth.ebnetter@verizon.net

Swapfests And Other Social Events

November 16-17, 2002, Indiana State Convention. Fort Wayne. IN. Contact Fort Wayne Hamfest & Computer Expo, PO Box 10342, Fort Wayne, IN 46851-0342. (260) 484-1314. E-mail kb9ih@arrl.net

January 4, 2003, Waukesha, WI West Allis Radio Amateur Club (WARAC) Midwinter Swapfest. Waukesha County Expo Center Forum. 8 a.m. to 2 p.m. Info: Phil Gural, W9NAW, 414-425-3649. Web: www.warac.org.

March 11, 2003, Wisconsin

Wisconsin QSO Party. Sponsored by West Allis Radio Amateur Club. Info: www.warac.org. April 19, 2003, Eau Claire, WI

April 13, 2003, Stoughton, WI Madison Area Repeater Assn. (MARA) Swapfest. Mandt Community Center, 400 Mandt Parkway, Stoughton WI. Doors open at 8 a.m. Sponsored by MARA/W9HSY, P. O. Box 8890, Madison WI 53708-8890. Info line: 608-245-8890.

Saturday April 19, 2003, Eau Claire Hamfest, Eau Claire County Exposition Center. Same location as last six years. Doors Open 8:00 AM to 2:00 PM. Vendors: ARRL, Tower Electronics, Burghardt Amateur Center, QSL USA and many more! Door and Raffle Prizes.

Admission \$5.00, Tables \$ 10.00. Tailgating - FREE with paid admission. FREE COFFEE - The Coffee is always Free at the Eau Claire Hamfest. If you can't find what you want at the Eau Claire Hamfest, you probably didn't need it. Information: Jim Staatz KG9RA KG9RA@charter.net. Phone 715-838-9108. Web Page: www.ecarc.org.

July 12, 2003 Oak Creek, WI South Milwaukee ARC Swapfest '02. American Legion Post 434, 9327 South Shepard Ave., Oak Creek, WI.

August 9, 2003, Baraboo, WI Sixth Annual Circus City Swapfest, Saturday, August 10, 2002, 7:00 am till Noon. Sauk Co. Fairgrounds, Baraboo, WI. Vendors, tailgate area, free parking, camping, VE

testing. For info, contact: Steve, N9UDO, 608-356-2313 or n9udo@arrl.net. Website www.qsl.net/ytarc/hamfest.htm.

September 2003, Peoria, IL Peoria Superfest 2003. Exposition Gardens Fairgrounds, 1601 W Northmoor Rd., off 6300 N. University, Peoria, IL. Contact: Peoria Superfest, PO Box 3508, Peoria, IL 61612-3508. InfoLine: (309) 692-3378. E-mail: w9uvi@arrl.net Website: www.w9uvi.org.

September 2003, Grayslake, IL Radio Expo 2003. September 2003, Lake County Fairgrounds, Rts 45 & 120, Grayslake, IL. Grounds Open from Thursday at noon. Flea Market open both days at 6 AM. Exhibit Buildings open Sat 8 AM to 4 PM, Sun 8 AM to 3 PM. The Chicago FM Club. Questions ??? Call Radio Expo 630-628-1501 (Voice-Mail & FAX). <http://www.chicagofmclub.org>.

May 5, 2003, Cedarburg, WI 25th Annual Amateur Radio and Computer Swapfest. Ozaukee Radio Club (ORC). Info: www.qsl.net/orc/swap.html.

Badger State Smoke Signals

Amateur Radio Education and Information

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EDITORIAL BOARD: Ken Ebnetter, K9EN; Don Evenson, K9JYX.

Subscription Rate

1 year (6 issues—bi-monthly)\$13.95

A subscription form is in this issue. Special club package reduced rates are available. For information, contact Ken Ebnetter, K9EN.

When to Send It

The closing date for each issue is the first of

the month before the issue date. For example, the closing date for the May issue is April 1. The only exception is for participating clubs' minutes. Participating clubs are requested to send their material no later than FIVE DAYS after the club's meeting. For example, if a club meets on the 4th of the month, the material should be sent no later than the 9th of that month. This material is to be sent to the Editor.

Where to Send It

Address changes and corrections, and exchange papers should be sent to Ken Ebnetter.

Editorial material, photographs, and feature articles should be sent to Ken Ebnetter, K9EN.

Web page material should be sent to n9qa@arrl.net (Dave Knaus, N9QA).

Inquiries about advertising should be directed to Ken Ebnetter.

Club, swapfest, and Test Point information should be sent to Ken Ebnetter.

Swapfest ADS should be sent to Ken Ebnetter, K9EN no later than eight weeks before the events date.

Subscriptions should be sent, with check or money order, to Ken Ebnetter.

Conditions for Reprinting or BBS Posting Material from Badger State Smoke Signals

Permission is hereby granted to reprint articles or posting articles on radio or telephone bulletin boards from *Badger State Smoke Signals*, providing credit is given to the original author, publication in which the article first appeared, and to *Badger State Smoke Signals*.

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Editorial Disclaimer

The opinions expressed in editorials, guest editorials, columns, articles, and letters from readers are the opinions of the authors only, and do not, unless otherwise stated, express or imply endorsement by *Badger State Smoke Signals*, or by any other individual or organization.

CLUB MEETINGS

Due to space limitations, we cannot always carry the full listing of club meetings. Please see the September 2002 listing for club meetings in your area. There have been no reported changes since that listing.

If your club meetings have changed or you wish to have your club listed, contact: Ken Ebnetter, K9EN at the address shown elsewhere on this page

The Test Point



Amateur Radio Examination Locations and Schedules in the Area

November 02, 2002	Racine, WI
November 02, 2002	St. Paul, MN
November 02, 2002	Menomonie, WI
November 03, 2002	Appleton, WI
November 02, 2002	Madison, WI
November 09, 2002	Blaine, MN
November 09, 2002	Oshkosh (Omro), WI
November 09, 2002	Onalaska, WI
November 14, 2002	Apple Valley, MN
November 16, 2002	Milwaukee, WI (BE)
November 16, 2002	Loves Park, IL
November 16, 2002	Cottage Grove, MN
November 19, 2002	Eden Prairie, MN
November 19, 2002	Sheboygan, WI
November 23, 2002	Bloomington, MN
November 30, 2002	Milwaukee, WI (MRAC)
December 07, 2002	Eau Claire, WI
December 07, 2002	St. Paul, MN
December 07, 2002	Racine, WI
December 12, 2002	Apple Valley, MN
December 07, 2002	Madison, WI
December 14, 2002	Blaine, MN
December 14, 2002	Oshkosh (Omro), WI
December 17, 2002	Eden Prairie, MN
December 28, 2002	Milwaukee, WI (BE)
December 28, 2002	Loves Park, IL
December 28, 2002	Cottage Grove, MN
December 28, 2002	Bloomington, MN
January 04, 2003	Madison, WI
January 04, 2003	St. Paul, MN
January 09, 2003	Apple Valley, MN
January 11, 2003	Oshkosh (Omro), WI
January 11, 2003	Blaine, MN
January 18, 2003	Cottage Grove, MN
January 18, 2003	Milwaukee, WI (BE)
January 18, 2003	Loves Park, IL
January 21, 2003	Eden Prairie, MN
January 25, 2003	Milwaukee, WI (MRAC)
January 25, 2003	Bloomington, MN
January 25, 2003	Tomahawk, WI
February 01, 2003	Madison, WI
February 01, 2003	Racine, WI
February 01, 2003	St. Paul, MN
February 08, 2003	Blaine, MN
February 08, 2003	Oshkosh (Omro), WI
February 13, 2003	Apple Valley, MN
February 15, 2003	Loves Park, IL
February 15, 2003	Cottage Grove, MN
February 15, 2003	Milwaukee, WI (BE)
February 18, 2003	Eden Prairie, MN
February 22, 2003	Bloomington, MN
February 22, 2003	Milwaukee, WI (MRAC)
February 22, 2003	Tomahawk, WI
March 29, 2003	Menomonie, WI
November 01, 2003	Menomonie, WI
Monthly, 1st Sat. (except Jan., Jul., & Aug.)	Racine, WI
Monthly, 1st Sat.	St. Paul, MN
Monthly, 2nd Thu.	Apple Valley, MN
Monthly, 1st Sat.	Madison, WI
Monthly, 2nd Sat.	Blaine, MN
Monthly, 2nd Sat.	Oshkosh (Omro), WI
Monthly, 3rd Tue.	Eden Prairie, MN
Monthly, 3rd Sat. (September through April)	Milwaukee, WI (BE)
Monthly, 3rd Sat.	Loves Park, IL
Monthly, 3rd Sat.	Cottage Grove, MN
Monthly, 4th Sat.	Bloomington, MN
Monthly, Last Sat. (except Mar., Jun., Aug., & Dec.)	Milwaukee, WI (MRAC)

Monthly, Last Sat. Tomahawk, WI
(January thru October only)

GENERAL RULES FOR MOST EXAMINATIONS Be sure to check with sponsors before going to an examination session. There may be changes and/or errors in the dates or information given. Some examinations require filing an FCC or NCVEC Form 605 and advance registration at least 30 days before the exam date. Some VE teams permit walk-ins. Check with the sponsor.

Many hamfests and swapfests offer examinations. A hamfest entrance fee should not be charged if you come only to attend the examination. To register in advance, you must get a copy of the current FCC Form 605, and fill it out completely and correctly. Got your form from the FCC as instructed below, or from the American Radio Relay League, 225 Main Street, Newington, CT 06111. Please send an SASE if you request a form from the League. FCC Field Offices seldom stock forms. You can also get a form from

<http://www.fcc.gov/formpage.html>
or
<ftp://ftp.fcc.gov/pub/Forms/Form605>.

A form by FAX is available at (202) 418-0177 (request Form 000605). The FCC Forms Distribution Center will accept orders at (800) 418-3676. Form 605 has a main form, plus a Schedule D with two parts (for Vanity and Physician's Certifications). Forms can also be obtained from the sponsoring group.

See QST, WIAW bulletins, or The ARRL Letter regarding any annual exam fee changes. ARRL/VEC no longer gives a free code test or Element 2. Test fees: The ARRL/VEC has set its 2001 test fee at \$10.00. FCC requires applicants to show their original amateur license or CSCE to the VE team. You must also have a good copy of your license or CSCE. A copy of your license or CSCE must be attached to your FCC form 605 and most VE teams need a copy for their records. One good CSCE copy is sufficient. You are also be required to have a photo ID, or two other forms of ID. Contact the VE team for details.

Technician class licensees must show proof of testing before March 21, 1987, in order to upgrade to General with a code test only. Proof must be either in the form of a pre-3/21/87 license document or a "Letter of Verification of Technician License Held Prior to 1987" as requested in writing from the FCC, 1270 Fairfield Road, Gettysburg, PA 17325-7245. For those with internet access, a listing of exam sessions is available from:

<http://www.arrl.org/arrlvec/examsearch.phtml>

By checking this page, you can find registered VE sessions anywhere in the US and some overseas. You can search by country,

state or zip code. The listing is not specific to any particular VEC. It is a master database. Thanks to Bart Jahnke, W9JJ, ARRL/VEC

Wisconsin Rapids, ARRL/VE team: Oct. 26. 2002 St Lukes Church. 10th & Wood Ave. Registration: 8:30 a.m. to 9:00 a.m. Testing starts at 9:00 a.m. Testing for all classes. Walk-ins welcome. Contact: Clyde Deitz ab9eqdeitz@tznet or call 1-715-325-5521 and GOOD LUCK.

Adams WI, Adams County Library, 101 S. Main St., Adams. Saturday, November 9th at 1:00 PM. Enter from the Center Street entrance. Walk-ins are welcome. For more information contact: Ed Wagner at ab9fn@arrl.net or 608-584-4858. All ARRL rules, regulations and conditions apply to testing. Future dates: Feb. 8, May 10, Aug. 9, and Nov. 8, 2003.

Appleton WI, Fox Cities ARC (ARRL/VEC) All regular test sessions are held at the American Red Cross Building in Appleton. Testing starting at 8 a.m. No walk-ins after 9 a.m. For information, contact George R. Croy, W9MDP, 2113 Twin Willows Drive, Appleton WI, 54914. (920) 730-0967. Email: w9mdp@arrl.net.

Eau Claire WI, Eau Claire Amateur Radio: Eau Claire Hamfest. Held at Eau Claire Exposition Center, Lorch Avenue, Eau Claire. Walk-ins welcome. Examination session coordinator: Steve Bluem, KA9OMY, ka9omy@arrl.net. Telephone: 715-839-6509. www.ecarc.org. w9eau@ecarc.org.

Fond du Lac WI, Fond du Lac ARC (ARRL/VECCommunity United Methodist Church, 701 Minnesota Ave., North Fond du Lac. 9:00 a.m. Walk-ins allowed. Contact: Douglas J. Schultz, 920-922-3088, schultz74@charter.net.

Fort Atkinson WI, Tri-County Amateur Radio Club Second Thursday monthly except June to August, 7 p.m. Dwight Foster Public Library in Fort Atkinson. Contact: Glenn Eisenbrandt, WA9VYL, 920-563-6502, or John Satterlee, WA9SAB, 920-563-6381.

Hudson WI, St. Croix Valley AR Testing Col. St. Croix County Emergency, Government Center by jail, Carmichal Rd. lower level, Hudson WI 54016. Call for time and walk-in info, Contact: Gregory Miller (715)386-9857.

Jefferson WI, (ARRL/VEC) Tests at 9 a.m. American Legion Post 164, located at 321 N. Main St., Jefferson WI. Parking in back at the True Value Hardware. Enter

Main Street off hwy 18 at the Stop Light and turn North. Or from I-94 take hwy 26 into Jefferson and look for the Flag in front and a few blocks before Hwy 18. Bring picture ID and copies and originals of licenses and CSCE's. If you enter from the rear you can go upstairs to the test if the Bar is open. Test fee \$10 to ARRL/VEC. Please note that the Tri-County Amateur Radio Club March 17 Hamfest will be located at the Jefferson County Fairgrounds. Talkin on 145.49 Repeater. Information: www.cmdline.com/tcarc/.

Madison WI, First Saturday monthly: 8 a.m. to 10 a.m. Space Place, 1605 South Park Street, Madison. Please bring a picture ID, your original license, a copy of your license, and the original and a copy of any relevant CSCEs, and a check for \$10.00 made out to the ARRL/VEC. No appointments are necessary to take exams. Exams start promptly at 8 a.m. Questions may be directed to Tim Czerwotka, WO9U, at 608-239-3696 (home phone) or sent to wo9u@arrl.net.

Medford WI, (ARRL/VEC) Take Ogden St. west off of Hwy. 13 to the courthouse. Park on the street or in the parking lot on the south side of the courthouse. Use one of the two entrances there. Watch for the signs when you get into the building. Talk-in on the 147.15 (+600 kHz, 114.8 PL) repeater. Walk-ins welcome, but if you know you'll be attending, please let us know. Contact: Tom Hrdina, N9GEN, 2373 Willow Ave., Medford WI 54451. (715) 748-4054. E-mail: Mike, N9GHZ, muzikman@pcpros.net.

Menomonie WI, (walk-ins allowed). Saturday, March 29, 2003 and Saturday, November 1, 2003. ARRL/VEC. Location: NEWUW-Stout Communications, Millennium Hall, Broadway & 10th Ave., Menomonie WI. Contact: James P. Ley, 715-235-3998.

Milwaukee WI, Badger Examiners (W5YI VEC) September thru April, every third Saturday morning, 9:30 a.m. to noon. Badger Examiners group tests at AES (Amateur Electronic Supply) at 60th and Good Hope, Milwaukee (use the entrance numbered 5730). Exams are given at the old Serman Printing shop, just 300 feet west of the AES store. Novice to Extra are offered, and all test materials are provided. Fee is \$10.00, and bring your original license, or CSCE if needed. Also available are Commercial license exams GROL (General Radiotelephone license), GMDSS, Telegraph, Etc. Fee is \$35.00. For more information call Gary Sharbuno WI9M at (414) 355-0237.

Milwaukee WI, Milwaukee Radio

(Continued on page 5)

Wisconsin Nets Association Ltd.

Dean R. `Herriges, KB9ROB, Secretary
W370 S9590 Highway 67 • Eagle, WI 53119

WISCONSIN NETS

Net	WNA	Freq.	UTC	CDT	Manager
BWN	YES	3985	1200	0600	W9RCW
BEN	YES	3985	1800	1200	KE9VU
WSBN	YES	3985	2330	1730	K9FHI
WNN	YES	3723	0000	1800	KB9ROB
WSSN	YES	3645	0030	1830	N9BDL
WIN/W	YES	3662	0100	1900	WB9ICH
WIN/L	YES	3662	0400	2200	W9UW
RCRA	NO	01/61	0130	1930	KA9OMC
(Mondays CST— Menomonie Area)					
Green Bay Area	NO	72/12	0345	2145	WB9NRK
ARES	NO	4.65/5.25	0300	2100	
(South East/South Central Wisconsin)					

WISCONSIN SECTION STM REPORT SEPTEMBER 2002

Taking Control

Okay, it's time. We have been waiting and training and suggesting, but the results haven't been what we need. It's time for some additional net control stations. If you heard the last Wisconsin Nets Association meeting, you noticed that every net reporting listed lack of net control stations as a problem. And it's a problem quite easily solved. It just requires a little effort from those who already make the effort to check in.

One training exercise which you may observe on our section nets in the near future is QNG, passing the net control duties to another station. A regular NCS may call up the net, get things started, and then give the whole show to someone else. It would mean stations might find it advantageous to learn who has checked in and what traffic is listed beforehand -- or just find out at the time they take over. Either way, it would simulate a very real possibility of losing a net control mid-net. Conditions change. Equipment fails. Storms strike. It happens. Why not be ready for it on

our section nets?

At the risk of redundancy, repetition, and saying the same thing twice, here are some hints for being a good NCS.

How to Get Ready:

- A. Become familiar with the other stations on the net. Knowing correct call signs, names, and locations is a good idea. Even if you never perform as an NCS, it's always good to know with whom you're working and where they live. Check out the current QNI Index and Routing Guide at www.wna.eboard.com.
- B. Make some notes. Pay close attention to the stations that go off frequency to pass traffic. What frequencies does the net use to move traffic? Up to 95? Down to 77? UP 4? DWN 5? Usually the NCS knows the open spots, where adjacent nets are, etc. You'll get a feel for the NCS action by keeping track of what's happening.
- C. Try to guess what the NCS will do next. Sometimes, different types of traffic will appear on a net and the NCS will have to rank them in importance. For example, you may notice that out-of-state or "thru" traffic gets higher priority than a message bound for a city usually represented on the net. Of course, formal traffic will take precedence over "informal" exchanges.
- D. Notice the order of things.

Who's asked to check in first? Emergency and priority traffic holders? 9RN representative? Listen for the jargon, the pacing, and the phrases that make things flow. "Additional stations please call . . ." "NEED MKE, LAX, QNI K" Under poor conditions, hear how the NCS has the station holding the traffic and the receiving station establish contact on the net frequency before moving.

How to Serve as NCS

- (1.) Keep order. The NCS must call up the net at the right time and announce the purpose and procedures which apply. It's easy to follow a script, and net managers gladly provide the wording.
- (2.) As stations check in, get their calls right and don't forget to say or send the call of each station you acknowledge. They won't know if you've heard them unless you say so.
- (3.) Be friendly but efficient. As NCS, you are a facilitator, not a lecturer. Keep things moving. Handle all formal traffic first.
- (4.) If you take comments (or second-goes), remember to stand by frequently for additional check-ins. List the outstanding traffic each time you take a stand-by.
- (5.) If you have traffic, don't hesitate to send it on frequency, sending it properly to set an example.
- (6.) When band conditions are noisy, don't hesitate to ask for relays and assistance from stations who check in. Bad conditions might also prompt handling more traffic on net frequency, too.
- (7.) Remember to thank stations for checking in, for relays, and for their liaison duties.
- (8.) Time the entire operation for your net report. Include the time you take to send the net report to the NM at the end of the net, since that's net activity, too.
- (9.) When the net is closed,

you can send the net report to the Net Manager. Include the name of the net, the date, the number of stations who participated (include yourself), the number of pieces of traffic listed, the number cleared, the total time of the net (including traffic sent after the check-ins are

excused), and which stations served as liaisons to or from other NTS nets such as 9RN or WIN. There is now no excuse for you not to step in as net control when needed.

73- K9LGU/ STM - WI

WISCONSIN SECTION MONTHLY NET ACTIVITY SUMMARY SEPTEMBER 2002

NET	QNI	QTC	QTR	SSNS	NM
BWN	1148	1525	2075	37	W9RCW
BEN	425	46	821	30	KE9VU
WSBN	590	62	828	30	K9FHI
WNN	137	12	275	25	KB9ROB
WSSN	172	9	281	28	N9BDL
WIN/E	197	70	315	30	WB9ICH
WIN/L	206	55	404	30	W9UW
WARES	121	0	200	5	N6NKO
TOTALS	2987	1779	5177	213	

P S H R SUMMARY SEPTEMBER 2002

CALL	1	2	3	4	5	6	T
W9RCW	40	40	30	280	0	0	390
N9VE	40	40	30	240	15	0	365
AG9G	40	40	30	20	220	0	350
K9JPS	33	40	10	225	0	0	308
W9YCV	40	36	20	5	0	20	121
K9LGU	40	40	20	15	0	0	115
N6NKO	22	4	30	15	24	20	114
K9FHI	40	40	20	0	0	10	110
KB9KEG	40	38	20	0	0	10	108
N6NKO	10	0	30	10	30	20	100
-AUG							
N6NKO	10	2	30	10	15	20	85
-JUL							
N6NKO	12	2	30	68	0	20	132
-JUN							

WISCONSIN SECTION STATION ACTIVITY SUMMARY SEPTEMBER 2002

STATION	ORIG	RCVD	SENT	DLVD	TOTAL
K9JPS	0	386	33	366	785 - BPL
W9RCW	0	317	15	280	612 - BPL
K9LGU	0	196	26	187	409 - BPL*
N9VE	2	182	42	166	390 - BPL*
W9IHW	1	132	38	165	336 - BPL*
W9CBE	0	113	123	2	238
K9FHI	0	23	31	1	65
KG9B	0	15	46	0	61
AG9G	0	8	51	0	59
W9UW	0	39	18	0	57
KE9VU	0	24	29	0	53
WA9ZTY	0	0	50	0	50
KB9KEG	0	0	38	0	38
W9YCV	1	8	23	4	36
N9NNN	0	1	30	1	32
W9BHL	0	0	30	0	30
KB9ROB	0	22	3	1	26
AA9BB	0	0	26	0	26
WB9ICH	0	19	4	0	23
K9UTQ	0	0	5	0	5
W9PVD	0	1	2	1	4

The Computer

By Stan Kaplan, WB9RQR • 105 Martin Drive
Port Washington, WI 53074-9654
(262) 284-9346
Skaplan@mcw.edu



THE COMPUTER CORNER

No. 105. The Numbers Game, Revisited

- by Stan Kaplan, WB9RQR
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Port Washington, WI 53074-9654
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skaplan@mcw.edu

Back in May 1998 (#54, The Numbers Game), the column covered the disparity in reporting numbers by hard drive manufacturers who were trying to make their products look good. For example, if they made a drive that held exactly 40,000,000 bytes after formatting, they would call it a 40 Mb drive, when in fact it needed to hold 41,943,040 bytes to be called that. This stems from the fact that a kilobyte is 1,024 bytes, not 1,000, because in the computer world, binary notation is the standard, and $2^{10} = 1,024$.

Well, in an effort to clear up terminology, an international committee (the International Electrochemical Commission) set a new series of standard abbreviations and meanings. They actually did this way back at the end of 1998, and the standards should have become uniformly used and widespread by now. Change is slow; and they have not. Nevertheless, you will see these standards used more and more as time goes on, and they do help clear up the mess that existed before it was clear whether a notation was in decimal or binary.

Basically, the scheme is to add a lowercase letter “i” to any prefix to indicate it is in binary notation, while absence of the letter “i” indicates the old decimal system we are all familiar with. Thus, 1K = 1,000 (just like resistors), while 1Ki = 1,024 bytes. The new binary term is called kibibyte, while the old decimal is kilobyte.

Look at the table below to see how this plays out.

NAME		VALUE	POWER
Kilo	K	1,000	10^3
Kibi	Ki	1,024	2^{10}
Mega	M	1,000,000	10^6
Mebi	Mi	1,048,576	2^{20}
Giga	G	1,000,000,000	10^9
Gibi	Gi	1,073,741,824	2^{30}
Tera	T	1,000,000,000,000	10^{12}
Tebi	Ti	1,099,511,627,776	2^{40}
Peta	P	1,000,000,000,000,000	10^{15}
Pebi	Pi	1,125,899,906,842,624	2^{50}

Before this new standard, some folks called 1,048,576 bytes a “binary megabyte”. Now, just “mebibyte” is the correct term. Before the standard, 1,000,000 bytes was sometimes called a “decimal megabyte”, while now, just “megabyte” is correct.

So, is that new drive you are about to buy 40 gigabytes (40G), or is it 40 gibibytes (40Gi)? There is no way to tell, because the standards shown in the table are not yet used on an industry-wide basis. You can probably assume that the drive holds the lesser number, because 40 sounds bigger than 37.2G. Yes, there is a big difference - almost 7%, or 2,949,672,960 bytes! Deceptive marketing practices still rule; \$999.99 still sounds a lot less than \$1,000, even though the actual difference is only a penny.

Nevertheless, the new standards will take hold gradually, and you may have already seen that “i” or “bi” notation somewhere. Now you know what it means. Happy computing!

Check us out on the web at
[Http://www.bsسسs.org](http://www.bsسسs.org)

Computer Corner: First 100 on CD-ROM

Several years ago, Stan Kaplan (WB9RQR), author of the Computer Corner column in BSSS, released a compilation of the first 48 articles. A very strong response indicated that readers want a complete set of the articles. We now announce the release of the First 100, on CD-ROM.

All 100 articles are in Adobe Acrobat (.pdf) format, and there is an Index of Titles as well. Furthermore, the powerful search and link capabilities of the Acrobat Reader have been harnessed to make use of the CD-ROM a snap.

In the Index of Titles file on the CD-ROM, a click on any title will take you to the complete article, and you can switch back and forth between the articles and Index at will. Moreover, you can perform searches for individual words, and the search results will show all articles that

contain those words. A click will take you to any article in the list of those found, and the search words in that article will appear as highlighted text. Clearly, these capabilities make the CD-ROM a valuable reference tool for quickly finding topics of interest.

If you don’t have a copy of the Acrobat Reader, or if your copy is old, the latest version (5.0.5) is included on the CD-ROM, along with installation instructions.

The CD-ROM, including all the files and the Adobe Acrobat Reader, will be mailed to you for \$15.00 postpaid. Send your order with payment to the address below. Sorry, no credit card orders. Proceeds will benefit Wisconsin ARES/RACES.

Stan Kaplan, WB9RQR
105 Martin Drive
Port Washington, WI 53074-9654

(Continued from page 3)

THE TEST POINT

Amateurs' Club (MRAC VEC) Last Saturday, except in March, June, August, and December. In addition, we test at the West Allis RAC Swapfest in January and at Superfest in April. 9:30 a.m. to noon at Amateur Electronic Supply (AES), 5710 W. Good Hope Road (the door you enter is actually numbered 5730), Milwaukee. For additional information, call (262) 797-MRAC. Bring along your original license, CSCE (if any), and one (1) good quality photocopy of each, plus two forms of identification, such a driver's license, etc. Also required is \$8.00 for the exam fee. Walkins are welcome. To register in advance, use a post card. Print the grade of license you are applying for, your name, address, and telephone number, and send the card to MRAC/VEC, Milwaukee Radio Amateurs Club, P.O. Box 070695, Milwaukee WI 53207. Contact: John G. Kraak, 262-797-6722.

Onalaska WI, Riverland ARC (ARRL/VEC). Onalaska Community Center, 515 Quincy St., Onalaska. Contact: Roger Reader, KA9BKK, 608-783-0723, readers@centurytel.net.

Oshkosh WI (Omro)Oshkosh VE Team Amateur Radio exams monthly on the first Saturday. Registration begins at 8:30 a.m. and exams will be given from 9 a.m. until noon. Omro Community Center, 130 W. Larrabee, Omro WI. Walkins welcomed. Bring a good quality photocopy of your original license and any other necessary documents such as a CSCE, etc. The first session will be

through W5YI/VEC, and then sessions will alternate between ARRL/VEC and W5YI/VEC. The exam fee is \$6.65. For more information, please call Dick Lemme, K9FA, at (920) 235-0987, e-mail: lemme@vbe.com, or write Dick at 826 Jefferson Street, Oshkosh WI 54901.

Racine WI, Racine-Kenosha ARRL Amateur Radio Test Team (ARRL VEC). Monthly - first Saturday, except January, July, and August. Monthly exams are given 9 to 11 a.m. at the Faith United Methodist Church, 1013 Harmony Drive, Racine. Walk-ins are permitted. Talk in on 147.87/.27. Inquiries and registrations should be directed to Robert N. Jensen, W0WLN, 5616 Cambridge lane #6, Racine WI. Telephone (262) 886-8551. w0wln@wi.net.

Sheboygan WI, Sheboygan County ARC (ARRL/VEC). Tuesday, November 19 - 6:30 PM. Test sessions are held in the Red Cross Building, 2032 Erie Avenue, Sheboygan, Wisconsin. Signage on the front door will direct candidates to the proper room in the building. The test site is handicap accessible. While walk-ins are welcome, a phone call or e-mail ahead of time would be appreciated. Applicants are reminded to bring the customary photo ID, CSCEs, current/former licenses, other supporting documentation, and test fee. Contact: Michael J. Musiel, 920-946-1476. Email: k9sj@arrl.net.

Shell Lake WI, NORWESCO ARES/RACES (ARRL/VEC). Washburn County Law Enforcement Center, lower level meeting room, 421 Hwy 63, Shell Lake. Walk-ins allowed. This is for all

(Continued on page 11)

Mancorad Radio Club

Theresa Hartlaub, KB9KXE
Secretary

P.O. Box 294 • Manitowoc, WI
54221-0204



2-Meter Repeater: 146.01 Input/146.61

The October Mancorad Radio Club meeting was called to order by President Fred (W6BSF) at 7:35 pm. Theresa (KB9KXE) the secretary summarized the Sept. minutes which were accepted by motions from Red (N9GHE) and Bob (KB9INK). The treasure's report was given by Dick (N9QFY). These also were approved by motions from Dan (N9FVZ) and Gene (KB9KXF).

A thank you note was read by Pres. Fred from the North Woods to Capitol Bike Tour group. Our club picked them up near Elkhart Lake and rode with them to Sturgeon Bay.

They reported next year there would be a different route and our services will not be needed. But our presence was greatly appreciated.

The report was given on the annual Family Picnic held at Lincoln Park on Sept. 28th. Around 43 people attended and enjoyed horse shoes, T-hunts, lots of delicious food and good company. Next year's picnic has been set for Sept. 27th, again at Lincoln Park. Thank you to Bob (KB9INK) and Ken (K9HAG) and Mary (KB9GOY) for organizing and running the event.

President Fred handed out to attending members the membership form for next year. All others will be mailed to current members. Please fill them out, and send back in to the address noted with your membership dues. Also enclosed was the notice for the club Christmas party. This will be held January 3rd at Cedar Ridge. All details are on the sheet. "Please Note" that the cost is 9.00 in advance and 10.00 at the door. So please send in your money in advance. This way the treasurer can enjoy the party too.

Dues and Christmas Party money can be turned in at the Nov. and Dec. meetings also. Hope to see all members at the party. It is always a great time to get to know each other better and enjoy a delicious meal.

Theresa (KB9KXE) will pick up 2 Nescos from Metal Ware for the club. These Nescos will also be available for members to check out for personal use during the year.

Pres. Fred says there is a possibility of using the air conditioner from the other room next year in the club shack.

That would make meetings a much better place.

The club again welcomes a new member, Todd Klemish, (KC9CKN). Hope to see you at upcoming club events. They will be good opportunities for you to get to know other club member.

The last business of the night was elections for the upcoming year. Results are as follows: Directors--Bob (KB9INK), Dan (N9FVZ) and Red (N9GHE) are on. In case Red moves within the year, there will be a run off between Shawn (KC9AAH) and Vern (KB9EME). President--Fred (W6BSF), Vice President--Carl (KA9WYK), Treasurer--Dick (N9QFY) and Secretary--Theresa (KB9KXE). A huge thank you to all who ran for offices. Thank you to Ken for his time and effort on being a former past board member.

Ken (K9HAG) and Bob (KB9INK) will be presenting the Ham of the Year award at the Christmas party.

The attendance pot was won by Shawn (KC9AAH). He won \$6.00. It now goes back to 5.00.

Meeting adjourned at 8:25. Lunch was served. Next meeting will be November 13th at 7:30 at the club shack on Waldo Blvd.

Respectively submitted,
Theresa (KB9KXE), Secretary

Meeting Attendance

KB9YRC	Travis
N9FVZ	Dan
N9GHE	Red
W9OUT	Hub
KB9KXF	Gene
K9HAG	Ken
KB9GOY	Mary
KC9CKN	Todd
N9VIA	Oran
WB9VTM	Lyle
KA9WYK	Carl
KB9GRC	Tom
WD9ERM	Conrad
KC9AAH	Shawn
KB9EME	Vern
KB9INK	Bob
KB9KEM	Dick
WB9VYO	Vic
WB9DQD	Gene
N9QFY	Dick
W6BSF	Fred

Wisconsin Valley Radio Association

Rich Nesbitt, N9WPH, Secretary

P.O. Box 363 • Wausau, WI

Wisconsin Valley Radio Association

Meeting Minutes of October 1, 2002, at Marshfield Clinic - Wausau Center.

President Mark Rasmussen called meeting to order at 7:00 P.M.

Present: N9MEA, N9NMH, N9MO, KC9AEJ, KB9DED, N9NRC, K9DB, KB9YDP, N9NRA, K9YF, KB9ZOF, WA9NBC, N9PHC, W9WW, W9PBB, KC9CIY, WB2TLQ, KB9RXA, KB9VBR, W9GLG.

Program: Michael, KB9VBR gave two new Power Point presentations from the ARRL. "How to be a Media Relations Superstar" and "Public Relations for the Ham Radio volunteer." They explained the need to use Media coverage of community and Amateur Radio related events. How to organize a press kit with all the information you may need to answer questions. They stress the importance of getting the story right. Also tips on how to give an interview and choose the media that will reach your target audience. Bill, WB2TLQ told of Bernie, VK4EJ who needs only 4 more counties to have worked all Wisconsin Counties. This could be a good story and show cooperation of Amateur Radio Operators from around the world. He has asked the club to help Bernie get the award. Bill asked about the Wisconsin QSO Party and if the club has any plans. This all led to the second presentation. It involved things to do to promote Amateur Radio and your club. "100 Great ideas to help your Club." There are many things that can be done and the presentation listed ideas by the month. Some of interest to the members were, a Special Event from the Wausau White Water Park, Field Day, Blood Drive, A Special Event on Halloween from a cemetery, JOTA, operate from the mall, Santa Parade, Railroad Days and Straight Key Night. There will be future discussions and some planning for some of the ideas mentioned.

President Mark Rasmussen began the meeting by having all the members present introduce themselves.

Secretary's Report: Minutes of the September 3, 2002 meeting were accepted as published in Badger State Smoke Signals and/or posted on the WVRA Web Site. home.dwave.net/~wvra

Treasurer's Report: Motion to accepted as read by Rich, N9MO: KB9YDP Second: N9NRA

Old Business:

1. The club will hold an auction after a short meeting on November 5th. You will be able to park and enter trough the west side of the building. If you or if you know of anyone who would like to donate any radio related items to the club for the auction please contact any of the Board Members.

2. There is no program set for December but some of the ideas are program radios of member's to handle the odd split of the potable repeater or a "Ham of The Year" award. If you have any ideas or would like to see programs on a particular subject contact any of the Board Members.

3. Jon, KC9AEJ has a new net control operator schedule, which will be distributed soon. He welcomed Lance, KC9CIY as the Net Control Operator for the 5th Wednesday of the month.

4. APRS - Michael, KB9VBR informed the members that Coloma has a radio and TNC to run APRS but it may take a little time to get it up and running. This should fill the gap between Wausau and Madison. Len, N9QIP may put a digi up at Baraboo but he needs a TNC. The club will need more cables for the APRS radios.

5. The Halloween Patrol will be October 27th from 4:00 P.M. to about 8:00 P.M. If you can participate please contact Myron, KB9STB.

6. Matt, N9NMH informed the members that the trailer is still in need of work but now has new tires and lights so it can be moved.

7. The Santa Parade will be December 6th. If you have any ideas for a float please let any of the Board Members know.

8. There is still no word as to even if there will be a Santa Train this year. More info will follow.

9. ARES - SET will be on October 5th at 8:00 A.M. A catch this year is that the traffic must pass out of the county on HF at some point. The next ARES meeting will be October 22nd at the State Patrol in Rib Mountain at 7:00 P.M.

New Business:

1. Myron, KB9STB has been shopping for good quality jackets for the club. He will report at a later meeting.

(Continued on page 7)

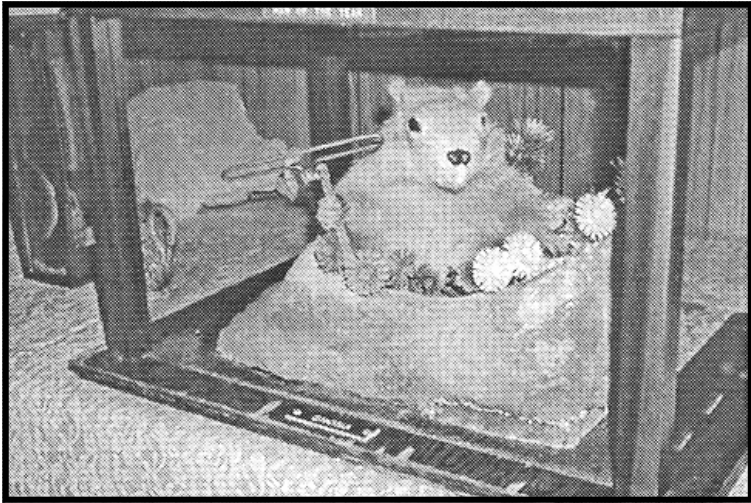
(Continued from page 6)

- 2. Scott, KB9PVI may be moving because of a change in his employment. The club will then need someone to be the Web Master for the WVRA club web page. Bill, WB2TLQ has volunteered to take over the job. Good luck Bill.
- 3. Mark, N9MEA mentioned that the Badger State Games would be coming soon so make plans to help if possible.
- 4. JOTA - The club will ask Jack, N9LIA to contact the Boy Scout Council.
- 5. Matt, N9NMH mentioned that Saturday will be "Hams and Eggs" at Annie's Restaurant at about 9:00 A.M. Please let him know if you are coming so he can reserve a table.
- 6. Club I.D's will be printed at the meeting in January or February.

Motion to adjourn at 8:38 P.M.:
KB9YDP Second: N9NRA

The next meeting will be Tuesday November 5, 2002, at 7:00 P.M. at the Marshfield Clinic - Wausau Center Cafeteria. (Formerly known as the Wausau Medical Center). Park and enter from the main parking lot at the main entrance on the East side of the building. Call in on 2-meter club repeater if you need directions: frequency is 146.640 (pl 114.8).

Respectfully submitted,
Jerry Graebel - W9GLG
(w9glg@arri.net)
WVRA Secretary



The original ground hog under glass with "Ghona" and his antenna and body coming up out of "Hole No. 1"

ELMER

by Rich Regent, K9GDF



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***THE WISCONSIN
PACKETEER***

(Continued from page 10)

of the Northeastern and Northern nodes from 446.100 to 446.300. 446.300 was originally intended for usage in the southern part of the state. Somehow the band plan in place at the time, which we are still trying to adhere to, was circumvented and now too many nodes populate this frequency.

Andy will contact Steve KE9LZ and ask if a change to 446.300 is feasible. Old 446.100 crystals would be reused in the southern part of the state.

Tertiary to that discussion was the current packet situation in the West/Northwest part of the state. Just across the state border from Pierce county lies a nuclear power plant in Minnesota, and the Wisconsin WEM would like some kind of digital connectivity with Pierce County as part of their disaster plans. In the interim, the Pierce county hams have decided to use Pactor on HF as their digital link. It was noted that we currently do not have enough network infrastructure to support any linkage to them via packet, and the idea of a packet linkage was tabled. It will be addressed in the future when we are further along with the Western part of the network.

Next up was a discussion of the lack of a reliable linkage to Timm's hill, near Spirit. Joel reports that past experiments on both UHF and 6 Meters have not been successful. An ideal place for an backbone and LAN nodestack would be the Wausau area. After repeated appeals in the BSSS columns for someone to step forward, we still have not had anyone offer to put a node up in that area. As a result, Andy will make inquiries there and see what can be done to help this situation.

This concluded the network discussion. Next on the agenda was election of officers. However, a voting quorum was not present. A vote was tabled, with current officers continuing in their current positions. The issue will be revisited at the next meeting.

Preliminary plans call for that meeting to be held in March or April in Pitts-ville. We will make more concrete plans after the New Year and publicize them when they have been made.

A motion to adjourn was made, seconded, and approved. Adjournment was at 12:46 P.M.

Submitted October 27, 2002 by
Andy Nemec, KB9ALN, Secretary of the

Wisconsin Amateur Packet Radio Association.

Net/Rom Node Information for the Sysop - Part 15

by Andy Nemec, KB9ALN

The last 14 parts of this series have been devoted to an exploration of the various Sysop commands for TheNet X-1J node firmware. In the next few parts of this series, we'll look at what a Sysop needs to know in order to set up the TCP/IP router portion of the node.

We'll start with some basic TCP/IP concepts, explain what they do, and when possible, compare them to more conventional modes of packet operation.

The Beginning

Most people immediately assume that TCP/IP over packet is hopelessly complex and not worth the trouble. That's

only because they are unfamiliar with it, and their sources of information may not have been the easiest to understand. It is remarkably similar to what we normally use, just more capable.

The Internet is where TCP/IP came from, and using it over packet radio is kind of a natural. Why? Because "packetized" data is sent over the internet, just as in packet radio. A packet starts at one computer and makes it's way to a destination computer. These packets are relayed over a network, just as our Net/Rom nodes do with "conventional" packet radio. It's just that TCP/IP can do more and does it in a somewhat different way.

There are chiefly two differences:

- TCP/IP is capable of not only plain text and file transfers, but has special methods of communication that allows other types of operating.

- The computers used in TCP/IP stations are numbered, rather than assigned a call-sign. Call-signs are associated with particular IP addresses, however.

Let's explore these differences in a little detail (but not too much).

The first difference speaks about protocols. TCP/IP is a "protocol set". Don't let this term intimidate you - a protocol is simply a commonly agreed-upon method for two computers to communicate. TCP/IP uses several different methods for two computers to communicate, depending on the job. Therefore, it's a "protocol set" - a collection of tools designed to do a variety of specialized jobs.

Just as we need call-signs to tell one amateur station from another, TCP/IP uses a numbering system to differentiate one computer from another. Of course we have a legal requirement to identify our stations, "normal packet" or otherwise. Therefore, this number is associated with a call-sign and "Host Name". In fact, this "Host Name" is generally based on a call-sign.

How to Marry the Different Methods

Most packet operators know that we use the "AX.25 Protocol" to communicate

(Continued on page 9)

WISCONSIN AMATEUR PACKET RADIO MEMBERSHIP APPLICATION

PLEASE PRINT:

NAME: _____ CALL: _____ HOME PHONE: (_____) _____

ADDRESS: _____ CITY: _____ STATE: _____ ZIP: _____

HOME BBS: _____ FREQ: _____ (Listing your home BBS is important)

MY PACKET STATION OPERATES: _____ DAY _____ NIGHT _____ 24 HOURS

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Wisconsin Amateur Packet Radio Association
Allen Schnepf, N0GMJ, Treasurer

(Continued from page 8)

on packet radio, even if they don't know exactly what it is. They may also know that Nodes use the "Net/Rom protocol" to communicate amongst themselves. Which makes for an interesting question - when Net/Rom is used, does a TNC switch protocols? What mechanism is used when we use a node?

The answer to that is simple - all Net/Rom operation is carried inside of an AX.25 protocol packet. A special "Protocol Identifier" is used to signal the receiving computer (in the case of a node, a TNC) that "we'll be using the Net/Rom protocol for this connection".

The same "protocol switching" is done with TCP/IP. There is a provision in the AX.25 protocol that allows a select few other protocols to be used, among them the TCP/IP set. The mechanism is the same as in the Net/Rom example above.

The IP Address and its Significance

The IP Address that is assigned to a computer (known as a "host") is structured specially, just as our call-signs are. There are 4 groups of numbers that are separated by periods, and each of these means something. These numbers range from 0 to 255. Let's look at a typical address of 44.92.20.9.

The first number is the network address - 44. All amateur stations can be assigned an address, and amateur IP addresses for radio use begin with 44. That block of addresses is reserved for amateur operators.

The second number designates the regional network. In Wisconsin and the Upper Peninsula of Michigan, this will always be 92. In other states and countries, it will be different.

The third number is the sub-net within that region. For example, the Green Bay and Brown County sub-net is designated as 20. In Appleton and the Fox Cities, this is 18.

And the last number is the individual host address. In our above example, we showed an address from the Green Bay sub-net. Another station in the Green Bay sub-net may be, for example, 44.92.20.32. Same structure and most of the numbers are the same, with the exception of the last number.

This is significant because we use the similarities in addresses to "sort out" one IP address from another and therefore, determine where to send them in the network.

Delivering Packets through a Network

When we use the node network in the usual manner, we tell our node the

alias of the node that we wish to connect to. One node knows of the existence of another node because it has heard node broadcasts that tell it how to reach our destination node. TCP/IP capable nodes do this and have the added capability of knowing how to reach other TCP/IP nodes.

And that is where the similarities (and the differences) in IP addressing come into play. IP Packet routing is accomplished by looking at the common elements of an IP address, and associating them with another node.

Both nodes are referred to as "Routers" in IP terms. Every X-1J node that has TCP/IP active is in fact an IP router. A router simply sends a packet to it's particular destination, or to another router (node) along the way that will send it to it's destination.

This routing information is entered in by the node sysop. It remains in memory until it is erased. They don't rely on node broadcasts to obtain routing information. While it is possible to broadcast TCP/IP routing information, TheNet X-1J doesn't support this type of operation.

Summing Up

Here are the main points we have covered so far:

1. TCP/IP is a collection of tools called a "Protocol Set".
2. These protocols are transported by special AX.25 packets.
3. These special packets have a special "Protocol Identifier".
4. TCP/IP stations are computer "hosts" that have a unique IP Address.
5. An IP address has to be associated with a Call-Sign based host name.
6. These IP address have common elements, even though they are unique to a particular host.
7. The job of the X-1J node, in the TCP/IP world, is to relay and "route" packets. They function as "routers".
8. A router looks at common elements of an IP address and uses that to determine where to send an IP packet.
9. The sysop configures this behavior, rather than the router-node automatically picking this up via "node broadcasts".

And that is all for this part. We'll continue our exploration of what a sysop needs to know for TCP/IP configuration of TheNet X-1J next time. Until then, 73 from Andy.

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THE WISCONSIN PACKETEER

Wisconsin Amateur Packet Radio Association
Allen Schnepf, N0GMJ, Treasurer
Ogema, WI 54459

Andy Nemec, KB9ALN, Editor—453 Cottage Grove Avenue—Green Bay, WI 54304—e-mail: kb9aln@gbonline.com

WAPR News - November, 2002

by Andy Nemec, KB9ALN

Hello, everyone. Hope you're all prepared for Winter - we all know it's on the way and if you're like most hams, you have gotten all of your outdoor station maintenance chores done.

The big news for this month is really in our Meeting Minutes. We were able to have a good meeting in Oshkosh, thanks to the efforts of Aaron, KB9QWC. He was able to set us up in the Coughlin Center, a great facility for a meeting. I've included the meeting minutes elsewhere on this page.

There is some additional news, the restructuring of the packet station at the National Weather Service Office in Green Bay. As you know, this station has been operational for the last couple of years (save for a few times when the station was being upgraded), and it's about to get more recognizable. We'll be changing it's operation to that of a node, complete with alias, so it will be easier to connect to from the network. The equipment to make this possible is ready to be installed very soon.

For the temporary, it will still be KB9ALN-4. However, we are in the process of getting a club call for the Packerland Amateur Skywarn Society. We will also try for a vanity call that is indicative of its purpose. Keep your eyes on the node lists for an appearance from NWSGRB.

I've also received a note from Leroy, N8WQG in Crystal Falls, Michigan. Regular readers may remember that Leroy operates the MIIRN node near Iron River, in the U.P.

He tells me that work on that node is progressing, although slowly. So far, the feed line has been replaced, and next is the antenna. He is also attempting to find the problems with an intermittent Motorola Mitrek radio for the site. Like a lot of amateur radio facility sites, it's a little

tough to get to, especially in winter. Let's hope all goes well and he can get things together soon. The node currently operates, but sometimes is a little slow due to the weakened signal.

That's about all of the news, with the exception of what you'll find in the meeting minutes. As always, I'm interested in hearing your news. Drop me a line at one of the addresses at the top of this page if you have any news to share. In the meantime, 73 from Andy.

WAPR Meeting Minutes October 26, 2002

The meeting was held at the Coughlin Center in Oshkosh, and was called to order at 11:00 A.M. on October 26, 2002. 10 persons attended, among them were 3 board members.

Attending were:
Noel, N9BQM
Aaron, KB9QWC
Andy, KB9ALN
Greg, KB9SZP
Stuart, N9NCQ
Jason, N9PAV
Steve, KB9MWR
Rich, N6NKO
Mike, KB9QAL
Jack, W9ULA

Meeting minutes from the last meeting were read and approved by the membership. Al N0GMJ was not able to attend, so no treasurer's report was available.

The meeting centered around a lengthy discussion involving network nodes and routes, both existing and proposed.

First up was Greg, KB9SZP. He told us of plans to put up an Oshkosh area node, near the border with Fond du Lac County. His initial plans fell through, so he is working on a temporary alternate site until he can obtain a spot on a more permanent, higher tower site. The perma-

nent site will be a long-range site, with a dual-frequency backbone node, as well as a LAN node.

Part of the discussion involved IP addressing for nodes. KB9ALN questioned Greg on the location, so an appropriate sub-net can be created, or integrated into an existing su-net. It was finally decided to incorporate the Oshkosh area into the Fond du Lac area sub-net, and make this a two-county sub-net. Greg will contact Andy with the appropriate call signs and SSIDs of the new node, and address assignments would be made once this info is received.

Aaron, KB9QWC tells us that his BBS, formerly located in Clintonville, will be relocated to Oshkosh and put on the air once an Oshkosh node is operational.

Andy informed the group that the Manitowoc node stack is off the air as Red, N9GHE has moved out of the area. It is not expected to return, as no one has stepped forward and purchased the node and BBS system that Red had in place for many years.

Joel N9BQM tells us that the #WAYN4 node near Mayville is temporarily down for a tune-up, which should be completed shortly. Al N0GMJ has supplied the equipment for this site.

Rich N6NKO is working on placing a West Allis node on the air, and has done some preliminary testing. He reports that he has audibly heard two stations identifying on the backbone frequency. He is unable to monitor with a packet station, as the radio he is using is not workable for packet use. He is currently shopping for a very compact radio to use for the node, as he has a very limited space for the installation.

The hope is that together with the Oshkosh and Mayville nodes, the West Allis node will link the Northeast and Western network circuits with the Port Washington, Racine and Milwaukee metro areas. It would also help to fill the void left when Red took his Manitowoc node off the air.

Next up was a discussion centering around the wide usage of 446.100 as a backbone frequency, and how to avoid the potential of interference between nodes located in the Northeastern and Lakeshore areas of the state with nodes in the Southern and Southwestern parts of the state. One idea put forth involves the use of 145.010 at 9600 baud as a "break" in the network to further distance nodes on the UHF backbone frequency.

It was also suggested that we may be able to use this frequency and speed to link to parts of Minnesota. Joel noted that we do have a link to Southeastern Minnesota already. He also told us that there was once a plan to link Northeastern Minnesota to Southeastern Minnesota via a 145.010 linkage along the Mississippi River. He also noted that the extreme Northwestern part of Wisconsin is linked to the Northeastern portion of Minnesota.

It was decided we will need to know more about what the folks in Minnesota plan on doing before we make any commitments to link to them on 145.010, if indeed it becomes necessary.

1. A verbal telling of the current node situation in the state was not very helpful, so a very crude non-scale representation of the state was drawn on the board and node locations were roughly drawn in. From this, we were able to ascertain that:
2. There are about 9 nodes in the southern part of the state operating on the frequency of 446.100.
3. There are 5 nodes operating on 446.100 in the northeastern and northern parts of the state, and another just across the border in Iron Mountain, Michigan.
4. There are 6 nodes operating on 446.200 in the Central and North Central parts of the state.
5. A proposal was advanced to change the backbone frequency

(Continued on page 8)



Yellow Thunder
Amateur Radio Club



WB9FDZ (Original Club Call)
K9ODK (Robert L. Prine Memorial Call)
Club net: Sundays 8:00 p.m. on 147.315
Raymond J. Matlosz, N9MLZ, Secretary
450 W. 2nd St., Reedsburg, WI 53959-1500

The meeting of October 1, 2002 was called to order at 7:15 p.m. by Steve Schulze, N9UDO.

Secretaries report was discussed accepted and approved by members.

Treasures report was read by Bill Klinkner, N9KXX.

OLD BUSINESS:

Christmas Party:

Pete Sweeney, WD9JIB, provided an update on his progress in securing a location for this year's Christmas party. To date he has looked into booking a room at The Voyageur Inn, in Reedsburg. The Voyageur Inn offers a prime rib special on Saturday nights at an approximate cost of \$12.99 per person, and on Friday nights a seafood buffet for \$9.95.

Club members discussed other options and locations:

- * Booking the lower dining area at the Highway House in Baraboo.
- * Contacting a local VFW or Legion Hall about using one of their facilities - if this option chosen, the party would more than likely have to be catered.
- * Ho-Chunk Casino - Bob Loomis, KB9VSQ volunteered to check on the cost for this option.

Club members voted on the day of the week they would prefer to have the party, and a Saturday night won the majority. The final date is contingent upon location and availability of our final choice. A \$15.00 spending limit per person was set by the club members. Pete will continue in his efforts to set up the party.

Communications Trailer:

Bill Klinkner, N9KXX, provided information on several of the issues the club members had concerning the communication trailer project. The club has been asked to help in the purchase of N9KAN's communication trailer in conjunction with the local Civil Air Patrol and the Sauk Prairie Fire Department. Club's contribution would be \$250.00. The trailer will soon be painted, and the names of the organizations involved will be painted on the sides.

1. Who has priority use of the trailer? The Prairie Du Sac Fire Department would have first priority, then other departments as part of 'mutual aid', HAM's, and CAP. It

would be possible for all to use it at the same time, if all are participating in the same event. 2. License and insurance? Would be paid by the Village of Prairie Du Sac. They will also have vehicles available that are already set up to pull the trailer. Also, any licensed vehicle that would be able to pull the trailer could be used and also considered to be insured when pulling the trailer.

Two new members to YTARC are also members of the Civil Air Patrol. They will be setting up stations for CAP and MARS in the communications trailer.

A motion was made and seconded, with one nay recorded, to contribute the \$250.00 toward the purchase of the communications trailer.

NEW BUSINESS:

Carriage Ride

Don Evenson, K9JYX, talked about the upcoming carriage ride event taking place in Baraboo on Sunday October 6. A request for volunteers was put before club members to assist with communications along the carriage route. Several of our club members have volunteered their services. It was noted that this will be good publicity for our ARES and YTARC organizations, as well as a good opportunity to gain experience in operating at a public service event.

Volunteers are to meet by the horse barn/arena area on Sunday morning at 0830. K9JYX will be on our repeater to help talk people in to the proper location.

Bob Loomis, KB9VSQ, offered to forward the information to the Juneau County Amateur Radio Club members during their October 2, 2002 net on Wednesday night.

Technician Classes

Tech classes are being offered at the Prairie Du Sac Fire Department and the Baraboo National Guard Armory. Prairie Du Sac FD: Saturday, Nov. 9 from 0800-1600 and Saturday, Nov. 16 from 0800-1200 followed by a break and then testing. Baraboo National Guard Armory: Tuesday evening, Nov.- from 1900-2130.

There will be 3 VE's available on Saturday Nov. 16 at the Prairie Du Sac FD for the testing session.

The meeting was adjourned at 7:58 p.m.

Our next meeting will be held on Wednesday, Nov. 6, 2002, 7:00 p.m. at the Sauk County Courthouse, EOC meeting room.

Respectfully submitted,

Lynn Loomis, KB9YOD, Secretary

The following members and friends were present:

Wayne Burgess N9UDX Lodi

Joe Williams	KJ9W	Bear Valley
Robert Loomis	KB9VSQ	Reedsburg
Chuck Humboldt	KC9BWS	Lodi
Bill Timme	N9NNN	Portage
Mike Leggett	N9LHR	Sun Prairie
Don Evenson	K9JYX	Baraboo
Dave Spearing	KB9CSW	Portage
Pete Sweeney	WD9JIB	Reedsburg
John E. Maybee	KB9PZL	Adams
Tabitha Maybee	KB9PZJ	Adams
Sierra Patterson		Adams
Rosie Maybee	KB9PZK	Adams
Lynn Loomis	KB9YOD	Reedsburg
Steve Schulze	N9UDO	Baraboo

(Continued from page 5)

THE TEST POINT

classes of license. Persons wishing to upgrade an existing license should bring a photocopy of it to submit. Also need a photo ID to prove who you are. The fee is \$10.00. Contact: Richard J. Eckenrode, 715-466-4109. E-mail: cen34109@centurytel.net. Web Site: fp1.centurytel.net/norwesco/.

Tomahawk WI, Tomahawk ARRL VE Team (ARRL/VEC). Last Saturday of every month, January thru October. Registration at 8:30 a.m. and testing starts at 9:00 a.m. For location or other information, inquire on 145.43 MHz. repeater or contact: Terry Collins, KB9AUP, W6564 Highway 8, Tomahawk WI 54487. Telephone (715) 453-4633, dcolins@newnorth.net.

Wisconsin Rapids WI, October 26, 2002. St Lukes Church, 10th Street and Wood Ave. Registration 8:30 am to 9:00 am. Testing starts at 9:00 am. Testing all classes Tech up to Extra. Walk-ins welcome. Wis. Rapids ARRL/VE team. Contact Clyde Deitz AB9EQ. deitz@tznnet.com or phone 1-715-325-5521.

St. Paul MN, Saint Paul Radio Club (SPRC) First Saturday of the month, 8:30 a.m. Test Site: St. Paul Technical College, 235 Marshall Ave., St Paul, MN. Ed Van-

Cleave, W0VC, (612) 636-0108. www.qsl.net/sprc/index.html.

Houghton MI, George R. Thurner, W8FWG, Team Liaison to ARRL for CCRAA/HARC Clubs, E-Mail: gthur@up.net.

Menominee MI, Marinette-Menominee Amateur Radio Club. Location: The cafeteria of Bay Area Med Center, US-41 in Menominee. Building located next to KFC just off the Interstate Bridge. All classes given. Advance notice preferred, but not required. Test fee is \$10 with two pieces of identification required. Contact Jeff Rymer, N9PQU at jrymer@ez-net.com or Ed Engleman, KG8CX, at dxe@cybrzn.com. We will monitor the 147.000 (107.2 pl) repeater in event further directions or info is needed.

Rockford IL, Northern Illinois Volunteer Examiners (W5YI VEC) Third Saturday of every month. 9:00 a.m. to noon. No new applicants after 11:00 a.m. Walkins welcome. Held at North Suburban District Library, 6340 North Second St. (Hwy. 251), Loves Park, IL. Rusty Cordell, WB9QYV, 1823 Hulin St., Rockford, IL 61102-2619. (815) 968-0080. e-mail: WB9QYV@aol.com.

Dubuque IA, Dubuque Hamfest Carl Clark, N0KAX, 2145 Delicia Drive, Dubuque, IA 52001. (319) 557-9149.

Publisher notes: Another issue is done. The next issue will be in mid December. If you have any material for that issue, please get to me by the first of December. For 2003 we will have an issue every other month starting with February. Hope that everybody has a happy Thanksgiving and a great holiday season to follow.

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<p>Ozaukee Radio Club 23rd ANNUAL RADIO AND COMPUTER SWAPFEST</p> <p>8 a.m. to 1 p.m. • Circle B Recreation Center Intersection of Highway 60 and County I Exams by Badger Examiners, c/o Gary Sharbuno, 5119 W, Willow Rd., Brown Deer, WI 53222 Swapfest sponsored by the Ozaukee Radio Club W55 N865 Cedar Ridge Drive • Cedarburg WI 53012</p>	<p>Circus City Swapfest Sponsored by the Yellow Thunder Amateur Radio Club Saturday, August 9, 2003 • 7 am—Noon Sauk County Fairgrounds • Baraboo, WI</p> <table border="1"><tr><td>Vendors • Concessions Camping • Free Parking Tail Gate Area</td><td>\$4.00 — Advanced \$5.00 — At Gate \$5.00 — 8 foot tables</td></tr></table> <p>Steve Schulze, N9UDO • Bill Klinkner, N9KXX (606) 356-2313 • (608) 643-6908/643-6453 http://www.qsl.net/ytarc/hamfest.htm,</p>	Vendors • Concessions Camping • Free Parking Tail Gate Area	\$4.00 — Advanced \$5.00 — At Gate \$5.00 — 8 foot tables	<p>SOUTH MILWAUKEE AMATEUR RADIO CLUB AUCTION Amateur Radio, Computers & Electronics Wed. March 12, 2003, 6:00 p.m. American Legion Post 434 Shepard Avenue • Oak Creek, WI (414) 762-3235 Ask for Verne P.O. Box 102 South Milwaukee, WI 53172 e-mail: ryatex@aol.com</p>
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